

ABSTRACT OF THE DISCLOSURE

Photosensitive resist material is coated on a substrate and exposed and developed to form a resist pattern. The surface layer of sidewalls and a top wall of the resist pattern is etched by plasma of a mixture gas of a first gas and
5 an SO₂ gas, the first gas being at least one gas selected from a group consisting of He, Ne, Ar, Xe, Kr, CO, CO₂ and N₂. Resist pattern deformation and pattern collapse can be prevented while the resist pattern shrinks.